

BEST AVAILABLE COPY

**REMARKS/ARGUMENTS**

The Applicants have carefully considered this application in connection with the Examiner's Action and respectfully request reconsideration of this application in view of the foregoing amendment and the following remarks.

The Applicants originally submitted Claims 1-23 in the application. In a previous response to a restriction requirement, the Applicants elected Claims 1-19. Presently, the Applicants have amended Claim 1 to correct a typographical error, cancelled Claims 20-23 without prejudice or disclaimer, as well as added new Claims 24-27. No other claims have been amended, cancelled nor added. Accordingly, Claims 1-19 and 24-27 are currently pending in the application.

**I. Rejection of Claims 1, 3, 7, and 8 under 35 U.S.C. §102**

The Examiner has rejected Claims 1, 3, 7, and 8 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,457,061 to Hong, *et al.* ("Hong"). Independent Claim 1 currently includes the element of depositing an oxide material over a gate previously formed on a semiconductor substrate. Hong fails to disclose this element.

The Examiner argues that Hong teaches depositing an oxide material ( $\text{SiO}_2$ ) 36 over the gate electrode 38 and the semiconductor substrate. The Examiner is misinterpreting the Hong reference. Hong actually teaches depositing the oxide material 36 over a blanket layer of gate oxide material 32 and a blanket layer of polycrystalline silicon 34, and thereafter patterning the layers to result in the gate (e.g., word line) 38. Accordingly, the blanket layer of oxide material 36 is formed

BEST AVAILABLE COPY

before the gate 38. However, the claim language currently requires that the oxide material be deposited over the previously formed gate. Hong fails to teach this element.

Therefore, Hong does not disclose each and every element of the claimed invention and as such, is not an anticipating reference. Because Claims 3, 7 and 8 are dependent upon Claim 1, Hong also cannot be an anticipating reference for Claims 3, 7 and 8. Accordingly, the Applicants respectfully request the Examiner to withdraw the §102 rejection with respect to these Claims.

## II. Rejection of Claims 2, 12, 13, 16, 17 and 19 under 35 U.S.C. §103

The Examiner has rejected Claims 2, 12, 13, 16, 17, and 19 under 35 U.S.C. §103(a) as being unpatentable over Hong as applied to Claim 1, and further in view of U.S. Patent No. 6,137,718 to Reisinger ("Reisinger"). Independent Claims 1 and 12 currently include the element of depositing an oxide material over a gate previously formed on a semiconductor substrate. As established above, Hong fails to teach this element.

Hong further fails to suggest this element. Specifically, Hong fails to suggest this element because Hong teaches in detail that its blanket layer of oxide 36 is formed over the blanket layer of polycrystalline silicon 34 before the layers are patterned, and thus before the formation of the gate (e.g., word line) 38. Moreover, Hong fails to disclose any other oxide layer formed over the gate (e.g., word line) 38 that might be similar to the oxide material claimed. Accordingly, Hong fails to teach and suggest the aforementioned element.

BEST AVAILABLE COPY

The Examiner is offering Reisinger for the sole proposition that it is obvious to use a doped polysilicon gate, whether it be p-type doped or n-type doped, in MOS transistors. Without even addressing whether the Examiner's proposition is accurate, a teaching or suggestion of using a doped polysilicon gate is significantly different from a teaching or suggestion of depositing an oxide material over a gate previously formed on a semiconductor substrate, as currently claimed. Accordingly, Reisinger also fails to teach or suggest this claimed element.

Therefore, Hong, individually or in combination with Reisinger, fails to teach or suggest the invention recited in independent Claims 1 and 12 and their dependent claims, when considered as a whole. Accordingly, the combination fails to establish a *prima facie* case of obviousness with respect to these claims. Claims 2, 12, 13, 16, 17 and 19 are therefore not obvious in view of Hong and Reisinger.

In view of the foregoing remarks, the cited references do not support the Examiner's rejection of Claims 2, 12, 13, 16, 17 and 19 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner withdraw the rejection.

### III. Rejection of Claims 4-6, 14, and 15 under 35 U.S.C. §103

The Examiner has rejected Claims 4-6, 14 and 15 under 35 U.S.C. §103(a) as being unpatentable over Hong, and Hong in view of Reisinger, in the case of Claims 14 and 15, as applied to Claims 1 and 12 above, and further in view of U.S. Patent No. 6,303,490 to Jeng ("Jeng"). As previously mentioned, independent Claims 1 and 12 currently include the element of depositing an oxide material over a gate previously formed on a semiconductor substrate. As established above, Hong and Reisinger, either alone or in combination, fail to teach or suggest this claimed element.

BEST AVAILABLE COPY

Jeng also fails to teach or suggest the aforementioned claimed element. The Examiner is offering Jeng for the sole proposition that the oxide layer may be deposited by an anisotropic Physical Vapor Deposition (PVD) process, which comprises one of collimated sputtering, long throw sputtering or ionized metal plasma sputtering. Without even addressing whether the Examiner's proposition is accurate, a teaching or suggestion of depositing the oxide layer using an anisotropic PVD process is entirely different from a teaching or suggestion of depositing an oxide material over a gate previously formed on a semiconductor substrate, as currently claimed. Accordingly, Jeng also fails to teach or suggest this claimed element.

Therefore, Hong, individually or in combination with Reisinger or Jeng, fails to teach or suggest the invention recited in independent Claims 1 and 12 and their dependent claims, when considered as a whole. Accordingly, the combination fails to establish a prima facie case of obviousness with respect to these claims. Claims 4-6, 14 and 15 are therefore not obvious in view of Hong, Reisinger and Jeng.

In view of the foregoing remarks, the cited references do not support the Examiner's rejection of Claims 4-6, 14 and 15 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner withdraw the rejection.

BEST AVAILABLE COPY

**IV. Rejection of Claims 9, 10 and 18 under 35 U.S.C. §103**

The Examiner has rejected Claims 9, 10 and 18 under 35 U.S.C. §103(a) as being unpatentable over Hong, and Hong in view of Reisinger, in the case of Claim 18, as applied to Claims 8 and 12 above, and further in view of U.S. Patent No. 5,814,543 to Nishimoto, *et al.* ("Nishimoto"). As previously mentioned, independent Claims 1 and 12 currently include the element of depositing an oxide material over a gate previously formed on a semiconductor substrate. As established above, Hong and Reisinger, either alone or in combination, fail to teach or suggest this claimed element.

Nishimoto also fails to teach or suggest the aforementioned claimed element. The Examiner is offering Nishimoto for the sole proposition that the LDD regions may be implanted after forming the gate but before depositing the oxide layer. Without even addressing whether the Examiner's proposition is accurate, a teaching or suggestion of forming LDD regions after forming the gate but before depositing the oxide layer is entirely different from a teaching or suggestion of depositing an oxide material over a gate previously formed on a semiconductor substrate, as currently claimed. Accordingly, Nishimoto also fails to teach or suggest this claimed element.

Therefore, Hong, individually or in combination with Reisinger or Nishimoto, fails to teach or suggest the invention recited in independent Claims 1 and 12 and their dependent claims, when considered as a whole. Accordingly, the combination fails to establish a *prima facie* case of obviousness with respect to these claims. Claims 9, 10 and 18 are therefore not obvious in view of Hong, Reisinger and Nishimoto.

BEST AVAILABLE COPY

In view of the foregoing remarks, the cited references do not support the Examiner's rejection of Claims 9, 10 and 18 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner withdraw the rejection.

**V. Rejection of Claim 11 under 35 U.S.C. §103**

The Examiner has rejected Claim 11 under 35 U.S.C. §103(a) as being unpatentable over Hong. As previously mentioned, independent Claims 1 and 12 currently include the element of depositing an oxide material over a gate previously formed on a semiconductor substrate. As established above, Hong fails to teach or suggest this claimed element of independent Claim 1.

In view of the foregoing remarks, the cited reference does not support the Examiner's rejection of Claim 11 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner withdraw the rejection.

BEST AVAILABLE COPY

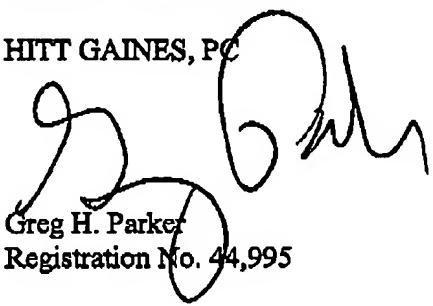
VI. Conclusion

In view of the foregoing amendment and remarks, the Applicants now see all of the Claims currently pending in this application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 1-19 and 24-27.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present application. The Commissioner is hereby authorized to charge any fees, credits or overpayments to Deposit Account 20-0668.

Respectfully submitted,

HITT GAINES, PC

  
Greg H. Parker  
Registration No. 44,995

Dated: 9-2-05

P.O. Box 832570  
Richardson, Texas 75083  
(972) 480-8800